



**LOUISVILLE METRO  
AIR POLLUTION CONTROL DISTRICT  
850 Barret Ave., Louisville, Kentucky 40204**



**14 June 2014**

**Statement of Basis**

**Company:** Clariant Corporation – Louisville West Plant

**Plant Location:** 1227 South 12<sup>th</sup> Street, Louisville, Kentucky 40210

**Date Application Received:** 04-07-2007

**Date Admin Complete:** 06-06-2007

**Date of Draft Permit:** 6-14-2014

**Date of Public Notice:** 6-14-2014

**District Engineer:** Karen Thorne

**Permit No:** 27755-14-TV

**Plant ID:** 0036

**SIC Code:** 2819

**NAICS:** 325188

**AFS:** 00036

**Introduction:**

This permit will be issued pursuant to: (1) District Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990.

Its purpose is to identify and consolidate existing District and Federal air requirements and to provide methods of determining continued compliance with these requirements.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), 1 hr and 8 hr ozone (O<sub>3</sub>), and particulate matter less than 10 microns (PM<sub>10</sub>); and is a non-attainment area for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and partial non-attainment for sulfur dioxide (SO<sub>2</sub>).

**Application Type/Permit Activity:**

☒ Initial Issuance

☐ Permit Revision

☐ Administrative

☐ Minor

☐ Significant

☐ Permit Renewal

**Compliance Summary:**

☒ Compliance certification signed

☐ Compliance schedule included

☐ Source is out of compliance

☒ Source is operating in compliance

**I. Source Information**

1. **Source Description:** Clariant Corp. – Louisville West Plant manufactures customized precipitated catalysts and catalyst carriers.
2. **Site Determination:** Clariant Corporation is the parent company, operates two facilities in Louisville, the South plant at 4900 Crittenden Drive and the West plant at South 12<sup>th</sup> Street. Based on information obtained from the company and the criteria used by EPA to make single source determinations, the District has determined that both locations are separate sources. Both locations would have to meet the following three criteria in order to be considered one single source for Title V and PSD/NSR applicability:
  - Same industrial grouping,
  - Common ownership or control, and,
  - Contiguous or adjacent locations.

Both locations have the same first two digit SIC code (28).

Both are 100% owned and operated by their parent company.

Neither location is contiguous or adjacent. Each plant acts independently of the other, operating separate production lines, with minimal transfer of material between plants that is commercially available from other suppliers. Furthermore, there are no Clariant Corporation dedicated transportation links between the plants.

**3. Permit Revisions:**

Revision	Issue Date	Public Notice Date	Type	Description
Initial	xx/xx/2014	xx/xx/2014	Initial	Initial permit issuance

4. **Fugitive Sources:** There are fugitive PM/PM<sub>10</sub>/PM<sub>2.5</sub>, VOC, HAP, NO<sub>x</sub> and TAC emissions from the manufacturing of customized precipitated catalysts and catalyst carriers.

5. **Emission Unit Summary:** Clariant Corp. – Louisville West Plant operates the following emission units.

<b>Emission Unit</b>	<b>Equipment Description</b>
201-W02	Sodium aluminate and sodium carbonate tanks
201-W03 and 201-W10	Copper Zinc Tabletting and C8 Calcining and Forming System
201-W04 and 201-W09	Material Transfer and #3 Rotary Calciner
201-W05	First Chemical Manufacturing
201-W06	LTS Wet system
201-W07 and 201-W14	Reactors
201-W11, 201-W12, 201-W17	#1 and #2 Spray Dryers and Slurry Manufacturing
201-W13	#3 Spray Dryer
201-W16	Sweeper System
201-W18	Screening System
201-W60	Nickel Rack Dumper and Product Drum
203-W19	Alumina Grinding System
203-W22	C Kiln Manufacturing
203-W23	Catalyst Drying
203-W24	HATA Tabletting Machine
203-W25	Specialty Extrusion Manufacturing
203-W26	Small Quantities Manufacturing
204-W28, 204-W29, 204-W30, 204-W42	Box Dryers and Sergeant Dryer System
204-W32 and 204-W39	C28 Manufacturing and Nickel Oxide Grinding
204-W34 and 204-W38	Mixing, extrusion, and granulation of catalyst ingredients
204-W35	Dipping System
204-W36	Small Eirich Mixing System
204-W37	Extruder/Small Belt Dryer System
204-W40	Pulvacron System
204-W43	Wyssmont Drying System
204-W58	Product Mixing System
212-W45	C84 North System
212-W47	C84 South System
212-W48	CA131 System
215-W50	Wastewater Treatment System
220-W51	Acid Unloading System
220-W52, 220-W53, 220-W54	Nickel Nitrate System, Reforming Catalysts Manufacturing, and Rotary Calcination
250-W55 and 250-W56	Houdry and Houdry Screening Systems
251-W57	G84 Styrene System
252-BOIL	Three (3) natural gas fired boilers
201-GASTK	Gasoline storage tank

**6. Emission Summary:**

Pollutant	Actual Emissions (tpy) 2012 Data	Pollutant that triggered Major Source Status
CO	21.19	No
NO <sub>x</sub>	30.70	*Yes
SO <sub>2</sub>	0.15	*Yes
PM <sub>10</sub> /PM <sub>2.5</sub>	25.51	*Yes
VOC	13.08	No
Total HAPs	0.80	*Yes

\* The source has accepted synthetic minor limits for these pollutants.

**7. Applicable Requirements:**

☐ PSD    ☒ 40 CFR 60    ☒ SIP    ☒ 40 CFR 63  
☐ NSR    ☐ 40 CFR 61    ☒ District-Origin    ☐ Other

**8. MACT Requirements:** 40 CFR 63 Subpart VVVVVV, *National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources***9. Referenced Federal Regulations in Permit:**

40 CFR Part 60 Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

40 CFR 63 Subpart CCCCCC, *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities*

40 CFR 63 Subpart VVVVVV, *National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources*

**II. Regulatory Analysis**

**1. Acid Rain Requirements:** The source is not subject to the Acid Rain Program.

**2. Stratospheric Ozone Protection Requirements:** This source does not manufacture, sell, or distribute any of the chemicals listed in title VI of the CAAA. Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

- 3. Prevention of Accidental Releases 112(r):** The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.
- 4. 40 CFR Part 64 Applicability Determination:** The source is not a major source because the source has taken synthetic minor limits for all criteria pollutants. Therefore, 40 CFR 64 does not apply. 40 CFR 63 VVVVVV requires Clariant West to obtain a Title V permit.
- 5. Basis of Regulation Applicability**

a. **Applicable Regulations:**

Regulation	Title
2.16	Title V Operating Permits
2.17	Federally Enforceable District Origin Operating Permits
5.00	Standards for Toxic Air Contaminants and Hazardous air Pollutants, Definitions
5.01	General Provisions
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference
5.14	Hazardous Air Pollutants and Source Categories
5.15	Chemical Accident Prevention Provisions
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
6.09	Standards of Performance for Existing Process Operations
6.15	Standards of Performance for Gasoline Transfer to Existing Service Station Storage Tanks (Stage I Vapor Recovery)
6.24	Standard of Performance for Existing Sources Using Organic Materials
6.40	Standards of Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery and Control Systems)
7.02	Adoption of Federal New Source Performance Standards
7.06	Standards of Performance for New Indirect Heat Exchangers
7.08	Standards of Performance for New Process Operations
7.09	Standards of Performance for New Process Gas Streams

Regulation	Title
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds
40 CFR 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
40 CFR 63 Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
40 CFR 63 Subpart VVVVVV	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources

**b. Plant-wide major source limits**

- i. Clariant Corp. – Louisville West Plant is a major source for PM<sub>10</sub>/PM<sub>2.5</sub>, NO<sub>x</sub>, VOC, single HAP, and total HAPs. To preclude the requirements of Regulation 2.04, Construction or Modification of Major Sources In or Impacting Upon Non-Attainment Areas, and Regulation 2.05, Prevention of Significant Deterioration of Air Quality, the source is subject to a plant-wide limit of less than 100 tons during any consecutive 12-month period for PM, PM<sub>10</sub>/PM<sub>2.5</sub>, NO<sub>x</sub>, and VOC.
- i. Pursuant to 40 CFR 63 Subpart VVVVVV, §63.11494(e), because the source installed a federally-enforceable control device on an affected chemical manufacturing process unit (CMPU), the source is required to obtain a Title V permit.
- ii. Pursuant to Regulation 2.17, section 5.1, the source is required to limit the plant-wide emissions of any individual HAP to less than 10 tons during any consecutive 12-month period. For all HAPs combined, the source is required to limit the plant-wide emissions of all HAPs to less than 25 tons during any consecutive 12-month period.
- iii. Pursuant to Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2, the source is required to monitor and maintain records of the throughput of each raw material and the HAP content for each raw material for each emission point during each calendar month and consecutive 12-month period.

- iv. Pursuant to Regulation 2.16, Section 4.1.9.3, the source is required to report the total plant-wide calendar month and consecutive 12-month emissions of PM<sub>10</sub>/PM<sub>2.5</sub>, NO<sub>x</sub>, VOC, each single HAP and total HAP for each month in the reporting period.
- v. The following emission units were removed and demolished: 201-W08, 201-W15, 203-W21, 203-W27, 204-W41, and 212-W44.

**c. Basis for Applicability**

Regulation	Basis for Applicability
2.16	Title V source
5.00	Establishes definitions of terms used in the Strategic Toxic Air Reduction Program
5.01	Establishes the requirements for Environmental Acceptability for Toxic Air Contaminants (TACs).
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.20	Establishes the methodology for determining the benchmark ambient concentration of a toxic air contaminant
5.21	Establishes the criteria for determining the environmental acceptability of emissions of toxic air contaminants
5.22	Establishes the procedures for determining the maximum ambient concentration of a toxic air contaminant
5.23	Establishes categories of toxic air contaminants.
6.09	Establishes emission standards for processes that emit PM which were installed prior to September 1, 1976.
6.15	Provides for the control of VOC emissions from gasoline delivery and storage tanks
6.24	Establishes VOC standards for affected facilities constructed prior to June 13, 1979.
6.40	Provides for the control of VOC emissions from motor vehicle refueling at gasoline dispensing facilities
7.02	Adoption of Federal New Source Performance Standards
7.06	Establishes emission standards for indirect heat exchangers constructed after April 9, 1972 with a heat input capacity of less than 250 MBtu/hr.
7.08	Establishes emission standards for processes that emit PM which were installed after September 1, 1976.
7.09	Establishes H <sub>2</sub> S, SO <sub>2</sub> , and CO emission standards for processes constructed after April 19, 1972.
7.12	Establishes VOC standards for storage tanks constructed after April 19, 1972 with a capacity greater than 250 gallons.
7.25	Establishes VOC standards for affected facilities constructed after June 13, 1979.

Regulation	Basis for Applicability
40 CFR 60, Subpart Dc	Establishes emission standards for Small Industrial-Commercial-Institutional Steam Generating Units constructed after June 9, 1989.
40 CFR 63 Subpart CCCCCC	Applies to the loading of gasoline storage tanks at gas dispensing facilities.
40 CFR 63 Subpart VVVVVV	Applies to chemical manufacturing process units that use as feedstocks, generate as byproducts, or produce as products the HAP listed in Table 1 of 40 CFR 63 Subpart VVVVVV, including chromium compounds, manganese compounds and nickel compounds at Clariant.

d. **Emission Units:** See the permit for a detailed list of permitted equipment.

e. **STAR Program**

- i. Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23 (STAR Program) establish requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. Clariant submitted their Category 1 and Category 2 TAC Environmental Acceptability Demonstration to the District on September 30, 2008. Regulation 5.21, section 4.1.4 exempts Category 2 TACs that were not reported on a company's Toxic Release Inventory (TRI) Report. SCI did not report chlorine, hydrochloric acid, phosphoric acid, and sulfuric acid on their 2007 TRI Report. Natural gas combustion sources at this facility are exempt in accordance with Regulation 5.21, section 2.7. For TACs listed as compounds, the BAC was developed for the base element, and therefore, all analysis for these TACs were done in terms of the amount of base metal present in the compound. At the West Plant, Clariant emits the TACs listed in the following table.

TAC	Abbreviation	TAC Category
Chromium <sup>hexavalent</sup> & chromium compounds	Cr(VI)	1
Chromium <sup>trivalent</sup> & chromium compounds	Cr(III)	1
Nickel & nickel compounds	Ni	1
Ammonia	NH <sub>3</sub>	2
Cobalt & cobalt compounds	Co	2
Copper & copper compounds	Cu	2
Hydrochloric acid (hydrogen chloride)	HCl	2

TAC	Abbreviation	TAC Category
Manganese & manganese compounds	Mn	2
Nitric acid	HNO <sub>3</sub>	2
Sulfuric acid	H <sub>2</sub> SO <sub>4</sub>	2

- ii. The source is required to comply with the EA Goals for all TACs in accordance with Regulation 5.01, 5.21, and 5.23. The source shall not increase the TAC content in a raw material or substitute any raw materials or additional TACs for those identified in the initial permit application for the processes or equipment that would result in an increase in the quantity of a TAC above de minimis levels or those previously demonstrated to be environmentally acceptable without prior notification to, and approval by, the District.
- iii. The emissions from many emission units are de minimis with control devices, as described in Regulation 5.21 Section 2. Compliance table on page 11 of this *Statement of Basis*. The potential emissions of Co, Cr(VI), Cu, Mn, Ni, and HNO<sub>3</sub> from the emission units listed in the following table are above the de minimis levels in Regulation 5.21. Therefore, the source performed an analysis of the environmental acceptability, resulting in the following risks and hazard quotients.
- iv. The individual hazard quotient (HQ) for copper from Stack S-201-W17-001 (EP DD-201-W11-110) of 1.8055 is greater than the EAC<sub>NC</sub> of 1.0. The source-wide HQ for copper of 4.75 is greater than the EAC<sub>NC</sub> of 1.0 for each individual TAC from all processes and process equipment. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for copper by September 22, 2014, 36 months after notification by the District that the BAC for Copper became more stringent. Clariant submitted a compliance plan on April 8, 2013.
- v. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 by removing cobalt-containing products from EU 201-W11 and EU 201-W12, 36 months after notification by the District that the BAC for Copper became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014.
- vi. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 for EU 204-W35, 36 months after notification by the District that the

BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014 and will submit a compliance plan by June 4, 2015.

EU	Stack ID	TAC	Risk ( $EAG_C$ )		HQ ( $EAG_{NC}$ )	
			Unadjusted $\leq 1.0$	Industrial $\leq 10.0$	Unadjusted $\leq 1.0$	Industrial $\leq 3.0$
201-W07	S-201-W07-003 (T-201-W07-505)	HNO <sub>3</sub>	--	--	0.49	2.48
	S-201-W07-005 (T-201-W07-501)					
	S-201-W07-001 (T-201-W07-500)					
250-W55	S-250-W55-001 (T-250-W55-102)					
201-W09	S-201-W08-002 (HT-W09-001)	Ni	.094	0.098	0.007	0.374
		Cr(VI)	0.068	0.071	0.035	0.037
201-W10	S-201-W10-003 (HT-201-W10-420 & H-201-W10-440 & 442)	Ni	0.20	--	0.015	--
	S-201-W10-007 (201-W10)	Cu	--	--	0.202	--
201-W11	S-201-W17-001 (DD-W11-110)	Cu	--	--	1.8055	--
		Mn	--	--	0.66	--
	S-201-W11-001 (SD-W11-130)	Cu	--	--	0.7511	--
		Mn	--	--	0.27	--
	S-201-W11-001 (SD-W11-130A)	Co	See Note 2.	--	--	--
201-W12	S-201-W12-002 (SD-W12-230b)	Cu	--	--	0.0102	--
	S-201-W12-002 (SD-W12-230a)	Cu	--	--	0.769	--
		Ni	0.04	--	0.0037	--
	S-201-W12-001 (DD-W12-210 / T-W12-210)	Co	See Note 2.	--	--	--
		Cu	--	--	0.2576	--
		Ni	0.57	--	0.044	--
204-W35	MX-204-W35-001	Co	See Note 2.	--	--	--
204-W37	CV-204-W37-001-004, PD-204-W37-001, HT-204-W37-001	Co	See Note 2.	--	--	--
204-W42	H-204-W42-001, HT-204-W42-001, PD-204-W42-001	Co	See Note 2.	--	--	--
	S-204-W42-001	Cu	--	--	0.767	--

EU	Stack ID	TAC	Risk ( $EAG_C$ )		HQ ( $EAG_{NC}$ )	
			Unadjusted $\leq 1.0$	Industrial $\leq 10.0$	Unadjusted $\leq 1.0$	Industrial $\leq 3.0$
	(HT-W42-001)	Ni	1.0	1.376	0.077	0.10
212-W45	HT-212-W45-001b (Stack S-212-W45-006)	Cu	--	--	0.961	--
		Ni	0.44	1.69	0.033	0.13
220-W53	S-220-W53-003 (DD-220-W53-006, H-220-W53-011, FD-220-W53-005, -007 and -019, BE-220-W53-001, FD-220-W53-020, SL-220-W53-012 and -013, H-W53-012, -013 and -016, V-W53-002 and -003, CV-220-W53-003 and -005)	Ni	0.46	0.46	0.035	0.035
250-W55	S-250-W55-031 (DD-250-W55-101/T-250 -W55-105)	Cr(VI)	0.11	0.20	0.0012	0.0021
	S-250-W55-027 (HT-250-W55-801 & HT-250-W55-801B as 801 carrier ht tr.)	Cr(VI)	0.88	1.59	0.0091	0.0165
<b>Plant-wide <math>R_C</math>: for new processes<sup>1,2</sup>:</b>			<b>0.88</b> ( $\leq 3.8$ )	<b>1.59</b> ( $\leq 38.0$ )	--	--
<b>Plant-wide <math>R_C</math>: for all processes<sup>1,2</sup>:</b>			<b>3.87</b> ( $\leq 7.5$ )	<b>5.50</b> ( $\leq 75.0$ )		

<sup>1</sup> Plant-wide  $R_C$  for unadjusted new and modified  $\leq 3.8$  and unadjusted total  $\leq 7.5$ ;

Plant-wide  $R_C$  for industrial new and modified  $\leq 38.0$  and industrial total  $\leq 75.0$ .

<sup>2</sup> The  $R_C$  does not include cobalt. Clariant will comply with the EA goals for cobalt by December 4, 2016.

Source-wide HQ ( $EAG_{NC}$ )		
TAC	Unadjusted $\leq 1.0$	Industrial $\leq 3.0$
Cr(VI)	0.046	0.056
Cu	4.75	--
Mn	0.93	--
Ni	0.215	0.643
HNO <sub>3</sub>	0.49	2.48

The level of controls needed to meet the TAC de minimis levels in Regulation 5.21 are listed in the table below (1<sup>st</sup> indicates first control device needed, etc.). The starred (\*) emission units can meet the de minimis values without a control device. For emission points that cannot meet the de minimis levels, the procedure used to calculate maximum ambient concentration (tier 1, 2, 3 or 4) from Regulation 5.22 is listed in the table. Emission point identification numbers are abbreviated.

EU	EP	Co	Cr(III)	Cr(IV)	Cu	HCl	Mn	NH <sub>3</sub>	Ni	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>
201-W03	FR-W03-450, MX-W03-460	--	--	--	2 <sup>nd</sup>	----	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	--
	H-W03-455	--	--	--	--	--	1 <sup>st</sup>	--	--	--	--
	H-W03-462, H-W03-465, H-W03-470, DU-W03-475/476, CV-W03-480, H-W03-471/ CV-W03-476, H-W03-476/ PA-W03-490	--	--	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	--
	COM-W03-465, M-W03-465, M-W03-466, TM-W03-470	--	--	--	2 <sup>nd</sup>	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	--
	FR-W03-467	--	--	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	--
201-W10	FR-W10-400, DD-W10-410/H-W10-410	--	--	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	--
	HT--420 and H-W10-440 & 442	--	--	--	Tier 3	--	1 <sup>st</sup>	--	Tier 2	--	--
201-W04	FR-W04-001	--	--	--	--	--	--	--	2 <sup>nd</sup>	--	--
	PD-W04-001	--	--	--	--	--	--	--	1 <sup>st</sup>	--	--
201-W09	DD-W09-001	--	--	2 <sup>nd</sup>	2 <sup>nd</sup>	--	--	--	2 <sup>nd</sup>	--	--
	H-W09-001	--	--	2 <sup>nd</sup>	1 <sup>st</sup>	--	--	--	2 <sup>nd</sup>	--	--
	HT-W09-001	--	--	Tier 3	1 <sup>st</sup>	--	--	--	Tier 3	--	--
201-W05	DD-W05-101, M-W05-101, M-W05-102, VS-W05-101, MX-W05-101, DD-W05-102	--	--	--	2 <sup>nd</sup>	--	--	--	2 <sup>nd</sup>	--	--
	FR-W05-103	--	--	--	1 <sup>st</sup>	--	--	--	--	--	--
	H-W05-101	--	--	--	2 <sup>nd</sup>	--	--	--	--	--	--
	FR-W05-104	--	--	--	1 <sup>st</sup>	--	--	--	1 <sup>st</sup>	--	--
201-W06	T-W06-022 and T-W06-025	--	--	--	--	--	--	--	--	*	--
201-W07	T-W07-505, T-W07-501, T-W07-500	--	--	--	--	--	--	--	--	Tier 3	--

EU	EP	Co	Cr(III)	Cr(IV)	Cu	HCl	Mn	NH <sub>3</sub>	Ni	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>
201-W14	DD-W14-001	--	--	--	--	--	2 <sup>nd</sup>	--	--	--	--
	T-W14-003	--	--	--	--	--	2 <sup>nd</sup>	--	--	*	--
201-W11	DD-W11-110	--	--	--	Tier 3	--	Tier 3	--	1 <sup>st</sup>	--	--
	SD-W11-130	--	--	--	Tier 3	--	Tier 3	--	2 <sup>nd</sup>	--	--
	SD-W11-130A	Tier 1	2 <sup>nd</sup>	--	--	--	2 <sup>nd</sup>	*	--	--	--
201-W12	SD-W12-230a /SEP-W12-240	--	--	--	Note	--	--	--	Tier 2	--	--
	SD-W12-230b /SEP-W12-240	Tier 1	--	--	Tier 3	--	5 <sup>th</sup>	--	5 <sup>th</sup>	--	--
	PD-201-W12-001	Tier 1	--	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	--
	T-W12-210, DD-W12-210	Tier 1	--	--	Tier 3	--	1 <sup>st</sup>	--	Tier 3	--	--
201-W13	DD-W13-310, VS-W13-330/Product drum and T-W13-310	--	--	--	1 <sup>st</sup>	--	--	--	2 <sup>nd</sup>	--	--
	SD-W13-330	--	--	--	2 <sup>nd</sup>	--	--	--	2 <sup>nd</sup>	--	--
201-W16	H-W16-001	*	*	--	1 <sup>st</sup>	--	--	--	1 <sup>st</sup>	--	--
	PD-W16-001	*	*	--	1 <sup>st</sup>	--	--	--	1 <sup>st</sup>	--	--
201-W60	DD-201-W60-001, PD-201-W60-001	--	--	--	--	--	--	--	2 <sup>nd</sup>	--	--
202-W18	BD-202-W18-002; DD-202-W18-001, -002, -003, -004 and -005; FD-202-W18-005; H-202-W18-001, -002, -003, -004 and -005; PD-202-W18-001, -003, -004 and -005; VS-202-W18-005	Final	Final	Final	--	--	Final	--	Final	--	--
	FD-W18-001, -003, & -004, VS-W18-001, -003, & -004	Final	Final	Final	Final	--	Final	--	Final	--	--
203-W22	HT-203-W22-900	--	--	--	--	--	--	*	--	--	--
	SH-203-W22-905, DD-203-W22-906, CV-203-W22-903	--	--	--	--	--	--	--	--	*	--
203-W23	HT-W23-534 and HT-W23-542	--	--	--	--	--	--	1 <sup>st</sup>	--	--	--
203-W24	DD-W24-001, H-W24-001, TM-W24-001, DU-W24-001,	1 <sup>st</sup>	--	--	--	--	--	--	2 <sup>nd</sup>	--	--

EU	EP	Co	Cr(III)	Cr(IV)	Cu	HCl	Mn	NH <sub>3</sub>	Ni	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>
	DB-W24-001, PD-W24-001										
203-W25	HT-W25-100HZ	--	--	--	--	--	--	--	--	2 <sup>nd</sup>	--
	HT-W25-100CZ-D, T-203-Acid-802, GR-W25-101, VS-W25-102, VS-W25-101	--	--	--	--	--	--	--	--	1 <sup>st</sup>	--
	T-W25-117, BE-W25-111, CV-W25-134, CV-W25-112, H-W25-136	--	--	--	--	--	--	--	--	*	--
	HT-W25-106HZ	--	--	--	--	--	--	1 <sup>st</sup>	--	--	--
203-W26	MX-203-W26-001, TR-203-W26-001, EXR-203-W26-001	--	--	--	--	--	--	*	--	--	--
204-W28, 204-W29	HT-204-W28-001 and HT-204-W29-001	--	--	--	--	*	--	--	--	--	--
204-W42	H-204-W42-001 and PD-204-W42-001	--	--	--	1 <sup>st</sup>	--	--	--	1 <sup>st</sup>	--	--
	HT-204-W42-001	--	--	--	Tier 3	--	--	*	Tier 3	--	--
204-W32	MX-204-W32-001, H-204-W32-409, H-204-W32-405, MX-204-W32-404	--	--	--	2 <sup>nd</sup>	--	--	--	2 <sup>nd</sup>	--	--
	FR-204-W32-402, DR-204-W32-001, PD-204-W32-001, H-204-W32-001, VS-204-W32-001, DR-204-W32-408, VS-204-W32-409, H-204-W32-408	--	--	--	1 <sup>st</sup>	--	--	--	2 <sup>nd</sup>	--	--
204-W39	DD-W39-410/H-W39-410, M-W39-412/ H-W39-411, FR-W39-415, DD-W39-400	--	--	--	2 <sup>nd</sup>	--	--	--	2 <sup>nd</sup>	--	--
	PD-W39-001, PD-W39-002, H-204-W39-416	--	--	--	1 <sup>st</sup>	--	--	--	2 <sup>nd</sup>	--	--
204-W34	T-W34-001, T-W34-002	--	--	--	--	--	--	--	--	*	--
	MX-W34-001, DD-W34-001	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	--	--	2 <sup>nd</sup>	--	--
	H-W34-001	--	2 <sup>nd</sup>	--	--	--	--	--	--	--	--
204-W38	H-W38-002, DD-W38-002, VS-W38-001, PD-W38-001/ PD-W38-002	--	--	--	1 <sup>st</sup>	--	--	--	2 <sup>nd</sup>	--	--

EU	EP	Co	Cr(III)	Cr(IV)	Cu	HCl	Mn	NH <sub>3</sub>	Ni	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>
	FD-W38-001	--	--	--	1 <sup>st</sup>	--	--	--	1 <sup>st</sup>	--	--
	M-W38-001	--	--	--	2 <sup>nd</sup>	--	--	--	2 <sup>nd</sup>	--	--
204-W35	T-W35-004 and T-W35-011	--	--	--	--	--	--	--	--	--	*
	MX-W35-001	Tier 1	--	1 <sup>st</sup>	--	--	--	--	1 <sup>st</sup>	--	*
204-W36	MX-W36-001	2 <sup>nd</sup>	1 <sup>st</sup>	--	--	--	--	--	2 <sup>nd</sup>	--	--
	FR-W36-001	1 <sup>st</sup>	--	--	--	--	--	--	1 <sup>st</sup>	--	--
	T-204-W36-001	--	--	--	--	--	--	--	--	*	--
204-W37	CV-W37-001 – 004 & PD-204-W37-001	Tier 1	--	--	--	--	--	--	--	*	--
204-W40	DD-204-W40-001, H-204-W40-001, PD-204-W40-001, PD-204-W40-002	--	--	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	--
	M-204-W40-001	--	--	--	3 <sup>rd</sup>	--	3 <sup>rd</sup>	--	3 <sup>rd</sup>	--	--
212-W45	DD-212-W45-001	--	1 <sup>st</sup>	--	--	--	--	--	--	--	--
	HT-W45-001a	--	1 <sup>st</sup>	--	Tier 3	--	--	--	Tier 3	--	--
	HT-212-W45-001b	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	--	--	2 <sup>nd</sup>	--	--
220-W51	T-220-W51-001	--	--	--	--	--	--	--	--	1 <sup>st</sup>	--
220-W52	T-W52-004, T-W52-003, T-W52-012	--	--	--	--	--	--	--	--	*	--
220-W53	DD-W53-006, FD-W53-005 and -007, BE-W53-001, SL-W53-012, -013, and -016, H-W53-011, -012 & -013, CV-W53-002 & -003, VS-220-W53-003, FD-W53-019 and -020, HT-W53-002, CV-W53-005	--	*	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	Tier 3	--	--
	VS-W53-004, SSD/SL-W53-00, BE-W53-002	--	*	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	--
220-W54	DD-W54-001 & -002, H-W54-001 & -002	--	--	--	--	--	--	--	2 <sup>nd</sup>	--	--
	DD-W54-004	--	--	--	--	--	1 <sup>st</sup>	--	2 <sup>nd</sup>	--	--
	DD-W54-005, H-W54-006, FD-W54-003	--	--	--	--	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	--
	DD-W54-020	2 <sup>nd</sup>	--	--	--	--	--	--	2 <sup>nd</sup>	--	--

EU	EP	Co	Cr(III)	Cr(IV)	Cu	HCl	Mn	NH <sub>3</sub>	Ni	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>
	CV-W54-020	1 <sup>st</sup>	--	--	--	--	--	--	1 <sup>st</sup>	--	--
	HT-W54-001b	4 <sup>th</sup>	*	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	--	--
	CV-W54-004	2 <sup>nd</sup>	*	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	2 <sup>nd</sup>	--	--
	VS-W54-002, H-W54-008, FD-W54-006, SSD-W54-002	1 <sup>st</sup>	*	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	2 <sup>nd</sup>	--	--
	H-W54-007, FD-W54-004	1 <sup>st</sup>	*	--	1 <sup>st</sup>	--	1 <sup>st</sup>	--	2 <sup>nd</sup>	--	--
	VS-W54-020, H-W54-020	2 <sup>nd</sup>	--	--	1 <sup>st</sup>	--	--	--	2 <sup>nd</sup>	--	--
250-W55	SS-W55-901, H-W55-802B, CV-W55-801B, BE-W55-901B, FD-W55-902B, VS-W55-901B, H-W55-901B, SS-W55-901B	--	1 <sup>st</sup>	2 <sup>nd</sup>			--	--	--	--	--
	EPD-W55-801, FD-W55-702	--	--	2 <sup>nd</sup>			--	--	--	--	--
	HT-W55-801	--	*	Tier 3			--	--	--	--	--
	H-W55-801, BE-W55-801, DD-W55-701, V-W55-703, H-W55-703	--	--	*			--	--	--	--	--
	HE-250-W55-901, BE-250-W55-901	--	*	*	--	--	--	--	--	--	--
	DD-W55-101/T-250-W55-105	--	--	Tier 3	--	--	--	--	--	--	--
	T-W55-102	--	--	--	--	--	--	--	--	Tier 3	--
	DD-W55-302, H-W55-304, FD-W55-301, GR-W55-301, H-W55-305, FD-W55-403, CV-W55-401 & -403, CV-W55-404/405, PE-W55-401/402, MS-W55-401, H-W55-402/403, CV-W55-501, DD-W55-1015	--	--	--	--	--	--	--	--	*	--
	MM-W55-401/402, CV-W55-402, EPD-W55-401, DD-W55-401, H-W55-401, FD-W55-406, VS-W55-501, BE-W55-501, H-W55-501, BE-W55-1020, VS-W55-1020, PA-W55-1020, H-W55-1020	--	--	--	--	--	--	--	--	1 <sup>st</sup>	--
	HT-W55-401	--	--	--	--		--	--	--	2 <sup>nd</sup>	--

EU	EP	Co	Cr(III)	Cr(IV)	Cu	HCl	Mn	NH <sub>3</sub>	Ni	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>
	FD-W55-703, SSU-W55-1016, SSB-W55-1017	--	--	1 <sup>st</sup>	--	--	--	--	--	--	--
	CV-W55-1015, BE-W55-801B, H-W55-801B	--	--	1 <sup>st</sup>	--	--	--	--	--	*	--
	HT-W55-801B as 801 carrier	--	3 <sup>rd</sup>	Tier 3		--	--	--	--	--	--
250-W56	DD-W56-950, DD-W56-951, H-W56-952, H-W56-953, VS-W56-956, SS-W56-957	--	1 <sup>st</sup>	2 <sup>nd</sup>	2 <sup>nd</sup>	--	--	--	--	--	--
	CV-W56-954, CV-W56-955	--	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	--	--	--	--	--	--
251-W57	BD-W57-004, BL-W57-001	--	2 <sup>nd</sup>	--	1 <sup>st</sup>	--	--	--	--	--	--
	BT-W57-001, CV-W57-006	--	2 <sup>nd</sup>	--	2 <sup>nd</sup>	--	--	--	--	--	--
	MX-W57-001-002, DR-W57-001, PD-W57-001, VS-W57-001, CV-W57-100, HT-W57-001, FD-W57-003-004, CV-W57-003, H-W57-007-008, VS-W57-002, H-W57-009, CV-W57-005-006, SSD-W57-001, DD-001/H-004, M-W57-004, TT-W57-005	--	1 <sup>st</sup>	--	2 <sup>nd</sup>	--	--	--	--	--	--

Note:

Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for copper by September 22, 2014, 36 months after notification by the District that the BAC for Copper became more stringent. Clariant submitted a compliance plan on April 8, 2013.

Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 by removing cobalt-containing products from EU 201-W11 and EU 201-W12, 36 months after notification by the District that the BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014 and will submit a compliance plan by June 4, 2015.

Permit No: 27755-14-TV

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The risks for cobalt from EP MX-204-W35-001, FR-204-W36-001, T-204-W36-001, CV-204-W37-001-004, PD-204-W37-001, HT-204-W37-001, H-204-W42-001, HT-204-W42-001, and PD-204-W42-001 are greater than the goal of 1.0. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 for these emission units, 36 months after notification by the District that the BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014 and will submit a compliance plan by June 4, 2015.

**d. Standards/Operating Limits****i. PM/PM<sub>10</sub>/PM<sub>2.5</sub>**

- 1) For emission points subject to Regulation 6.09 for PM, the PM emission standards are calculated per section 3.2. The equation to calculate the hourly PM emission limit is  $E = 4.10 P^{0.67}$ , where E is the allowable lb/hr PM emission limit and P is the process weight rate expressed in tons/hr.
- 2) For emission points subject to Regulation 7.08 for PM, the PM emission standards are calculated per section 3.1.2. The equation to calculate the hourly PM emission limit is  $E = 3.59 * P^{0.62}$ , where E is the allowable lb/hr PM emission limit and P is the process weight rate expressed in tons/hr.
- 3) For emission points subject to Regulation 7.06, the total heat input capacity of all affected facilities within a source, including those for which an application to construct has been submitted to the District, shall be used to determine the PM emission standards.

Boiler	Heat Input Capacity (MMBtu/hr)	PM Standard (lb/MMBtu)
7	25.2	$0.9634 \times 25.2^{-0.2356} = 0.45$
8	58	$1.919 \times (58 + 25.2)^{-0.535} = 0.18$
9	72.2	$1.919 \times (58 + 25.2 + 72.2)^{-0.535} = 0.13$
FB-250-W55-801B	1.5	$1.919 \times (58 + 25.2 + 72.2 + 1.5)^{-0.535} = 0.128$

**ii. Opacity**

- 1) For process equipment, Regulation 6.09, section 3.1, and Regulation 7.08, section 3.1.1, establish an opacity standard of less than 20%.
- 2) For indirect heat exchangers, Regulation 7.06, section 4.2 establishes an opacity standard of 20%.

**iii. HAP**

- 1) The plant-wide emissions are limited to synthetic minor limits to avoid the applicability of Regulation 2.04 and 2.05.
- 2) Per Regulation 5.02 section 4.127, the source is subject to 40 CFR 63, Subpart VVVVVV.

iv. **NO<sub>x</sub>**

Regulations 6.09 and 7.08, section 4.1 establish a NO<sub>x</sub> emission limit of 300 ppmv, expressed as NO<sub>2</sub>, or an invisible discharge for EP T-201-W07-510, T-201-W07-520, T-201-W07-550, HT-203-W22-900, HT-203-W25-106HZ, HT-204-W43-001, T-220-W52-005, HT-220-W53-002, HT-220-W54-001b, HT-250-W55-501, and HT-250-W55-801 as the 801 carrier heat treater.

v. **SO<sub>2</sub>**

- 1) For EP HT-203-W22-900 and HT-204-W42-001, Regulation 7.09, section 4 establishes a sulfur dioxide emission standard of 28.63 grains per 100 dscf at 0% excess oxygen.
- 2) Regulation 7.06 establishes SO<sub>2</sub> emission standards for indirect heat exchangers constructed after April 9, 1972 with a heat input capacity greater than one million Btu per hour. The total heat input capacity of all affected facilities within a source, including those for which an application to construct has been submitted to the District, shall be used to determine the SO<sub>2</sub> emission standards.

Boiler	Heat Input Capacity (MMBtu/hr)	SO <sub>2</sub> Standard (lb/MMBtu)
7	25.2	1.0
8	58	1.0
9	72.2	$7.7223 \times (58 + 25.2 + 72.2)^{-0.4106} = 0.97$
FB-250-W55-801B	1.5	$7.7223 \times (58 + 25.2 + 72.2 + 1.5)^{-0.4106} = 0.97$

vi. **VOC**

- 1) For EP HT-201-W05-101, T-201-W17-001, HT-203-W22-900, T-203-W25-117, HT-203-W25-100HZ, T-203-Acid-801, T-203-W26-001, T-203-W26-002, HT-204-W29-001, HT-204-W30-001, T-204-W32-001, T-204-W32-002, DR-204-W32-001, T-204-W32-002, T-204-W36-001, HT-204-W37-001, HT-204-W43-001, T-212-W45-003 and T-212-W45-004, Regulation 7.25 establishes a plant-wide VOC limit of 5 tons per year for all

affected facilities, unless Best Available Control Technology (BACT) level of control is utilized to reduce the VOC emissions. The District has determined that the thermal oxidizer represents BACT level of control for VOC for HT-203-W22-900.

- 2) For EP HT-204-W28-001, T-204-W34-001 and T-204-W34-002, Regulation 6.24 establishes VOC standards for processes constructed prior to June 13, 1979 that emit volatile organic compounds.
- 3) Regulation 7.12 establishes VOC standards for storage tanks with a capacity greater than 250 gallons. For storage tank T-220-Acid-800, the source shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia. The vapor pressure of acetic acid is 0.217 psia at 20°C.

vii. **TAC**

Regulations 5.01, 5.21 and 5.23 (STAR Program) establish requirements for environmental acceptability of TACs and the requirement to comply with all applicable emission standards. The emissions from many emission units are de minimis with control devices, resulting in the requirement to operate the control devices to maintain the de minimis status of those emission units, as listed in the STAR (Regulations 5.01, 5.21 and 5.23) Compliance on page 18 of this *Statement of Basis*.

viii. **Control Device Operation**

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, to maintain compliance with Regulations 2.04, 2.05, 5.01, 5.21, 7.08 section 3.1.2 and 40 CFR 63 Subpart VVVVVV.

e. **Monitoring and Record Keeping**

i. **PM**

- 1) Regulations 6.09 and 7.08 do not require any specific monitoring or record keeping requirements for PM. However, Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2 requires sufficient monitoring and record keeping to assure ongoing

compliance with the terms and conditions of the permit. The source is required to maintain records of all periods when a PM process was operating while an associated control device was not operating to assure ongoing compliance with the PM standards.

- 2) There are no compliance monitoring requirements for PM for Regulation 7.06. The potential uncontrolled PM emissions are below the applicable PM emission standard.

**ii. Opacity**

- 1) Regulations 6.09 and 7.08 do not require any specific monitoring or record keeping requirements for opacity. However, Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2 requires sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit.
- 2) Regulation 7.06 does not require any specific monitoring requirements to demonstrate ongoing compliance with the opacity standard, however, Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2 requires sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The District has determined that combusting natural gas will not cause an exceedance of the opacity standard. There are no compliance monitoring requirements for opacity for Regulation 7.06.

**iii. NO<sub>x</sub>**

- 1) Regulations 6.09 and 7.08 do not require any specific monitoring or record keeping requirements for NO<sub>x</sub>. However, Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2 requires sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit.
  - i. For EP HT-203-W22-900, HT-203-W25-106HZ and HT-204-W43-001, there are no monitoring or record keeping requirements for NO<sub>x</sub> because the potential uncontrolled emissions of NO<sub>x</sub> are below the emission standards in Regulations 6.09 and 7.08 for these emission units.
  - ii. For EP T-201-W07-510, T-201-W07-520, T-201-W07-550, T-220-W52-005, HT-220-W53-002, HT-220-W54-001b, HT-250-W55-501 and HT-250-W55-801B-801, the potential controlled emissions of NO<sub>x</sub> are below the emission standards in

Regulations 6.09 and 7.08. Therefore, the source is required to monitor and maintain records of the performance of each control device and monitor and maintain records of all periods of bypassing a control device to assure ongoing compliance with the applicable NO<sub>x</sub> emission standards.

iv. **HAP**

- 1) **Emissions Calculation Methodology:** The emission calculations are based upon the throughput of HAP containing material used and weight percent of the HAP.
- 2) The source is required to comply with applicable monitoring and record keeping requirements of 40 CFR 63, Subpart VVVVVV.

v. **SO<sub>2</sub>**

- 1) For EP T-220-W52-005, HT-220-W53-002 and HT-220-W54-001b, HT-203-W22-900 and HT-204-W42-001, there are no monitoring or record keeping requirements for SO<sub>2</sub>. The potential uncontrolled SO<sub>2</sub> emissions are below the applicable standard.
- 2) The potential uncontrolled emissions of SO<sub>2</sub> are below the applicable emission standard in Regulation 7.06; therefore, no compliance monitoring is required.
- 3) 40 CFR 60 Subpart Dc requires the source to record and maintain records of the amount of natural gas combusted each month.

vi. **VOC**

Regulation 7.25 does not require any specific monitoring or record keeping requirements to demonstrate compliance with the applicable emission standard. However, Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2 establishes requirements for sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit.

- 1) For EP HT-201-W05-101, T-201-W17-001, HT-203-W22-900, T-203-W25-117, HT-203-W25-106HZ, T-203-Acid-801, T-203-W26-001-002, HT-204-W29-001, HT-204-W30-001, T-204-W32-001, T-204-W32-002, DR-204-W32-001, T-204-W33-001, T-204-W36-001, HT-204-W37-001 and HT-204-W43-001, the source is required to maintain monthly records of the quantity of VOC containing materials used and calculate the VOC emissions

to assure compliance with the annual *plant-wide* VOC emission limit of 5 tons per year for these affected facilities subject to Regulation 7.25.

- 2) For 203-W22, the source is required to monitor and maintain daily records of the combustion chamber temperature for thermal oxidizer TO-203-CKLN-900 to assure a minimum temperature of 1400°F.
- 3) For EP HT-204-W28-001, T-204-W34-001 and T-204-W34-002, the potential uncontrolled VOC emissions are below the applicable lb/hr and lb/day standards in Regulation 6.24; therefore, no monitoring or record keeping is required to demonstrate ongoing compliance with Regulation 6.24.

vii. **TAC**

Regulations 5.01, 5.21, and 5.23 do not require any specific monitoring or record keeping requirements to demonstrate compliance with the applicable emission standard. However, Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2 establishes requirements for sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The source is required to maintain records of all periods when a TAC process was operating while an associated control device was not operating to assure ongoing compliance with Regulations 5.01, 5.21, and 5.23.

viii. **Control Device Operation**

Regulation 2.16 establishes requirements for sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. Furthermore, Regulation 1.05, Section 5 establishes requirements for maintenance and operation of air pollution control equipment. The source is required to monitor the performance of each control device and conduct monthly visual inspections to assure ongoing compliance. The source is required to report all periods of operating outside the established performance indicator range for a control device.

f. **Reporting**

There are no reporting requirements for PM, opacity or SO<sub>2</sub> for Regulation 7.06.

i. **PM/PM<sub>10</sub>/PM<sub>2.5</sub>**

Regulations 6.09 and 7.08 do not require any specific reporting requirements for PM. However, Regulation 2.16, Section 4.1.9.3 establishes requirements to assure ongoing compliance with the terms and conditions of the permit. The source is required to report all periods when a PM process was operating while an associated control device was not operating.

ii. **Opacity**

Regulations 6.09 and 7.08 do not require any specific reporting requirements for opacity. However, Regulation 2.16, Section 4.1.9.3 establishes requirements to assure ongoing compliance with the terms and conditions of the permit.

iii. **HAP**

- 1) Regulation 2.16, Section 4.1.9.3 requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to report HAP emissions.
- 2) The source is required to comply with applicable reporting requirements of 40 CFR 63, Subpart VVVVVV.

iv. **TAC**

Regulation 5.21 does not require any specific reporting requirements for TAC. However, Regulation 2.16, Section 4.1.9.3 establishes requirements to assure ongoing compliance with the terms and conditions of the permit. The source is required to report all periods when a TAC process was operating while an associated control device was not operating. The owner or operator shall submit notification to, and receive approval by, the District for any raw material change that increases the TAC content or introduces new TACs in this process equipment not identified in the permit application.

v. **NO<sub>x</sub>**

Regulations 6.09 and 7.08 do not require any specific reporting requirements for PM. However, Regulation 2.16, Section 4.1.9.3 establishes requirements to assure ongoing compliance with the terms and conditions of the permit.

- 1) The source is required to report all periods of bypassing a NO<sub>x</sub> control device while EP T-201-W07-510, T-201-W07-520 and T-201-W07-550, T-220-W52-005, HT-220-W53-002 and HT-220-W54-001b, HT-250-W55-501 and HT-250-W55-801 as the 801 carrier

heat treater were in operation.

- 2) For EP HT-201-W09-001, HT-203-W22-900, HT-203-W25-106HZ, and HT-204-W43-001, there are no reporting requirements for NO<sub>x</sub>. The potential uncontrolled NO<sub>x</sub> emissions are below the applicable standard.

vi. **SO<sub>2</sub>**

For EP HT-203-W22-900 and HT-204-W42-001, there are no monitoring or record keeping requirements for SO<sub>2</sub>. The potential uncontrolled SO<sub>2</sub> emissions are below the applicable standard.

vii. **VOC**

Regulation 7.25 does not require any specific reporting requirements to demonstrate compliance with the applicable emission standard, however, Regulation 2.16, Section 4.1.9.3 establishes requirements for sufficient reporting to assure ongoing compliance with the terms and conditions of the permit.

- 1) For EP HT-201-W05-101, T-201-W17-001, HT-203-W22-900, T-203-W25-117, HT-203-W25-106HZ, T-203-Acid-801, T-203-W26-001-002, HT-204-W29-001, HT-204-W30-001, T-204-W32-001, T-204-W32-002, DR-204-W32-001, T-204-W33-001, T-204-W36-001, HT-204-W37-001 and HT-204-W43-001, the source is required to report the *plant-wide* consecutive 12-month VOC emissions to demonstrate compliance with Regulation 7.25. The source is required to report all periods of bypassing TO-203-W22-900 while EP HT-203-W22-900 was in operation.
- 2) For EP HT-204-W28-001, T-204-W34-001 and T-204-W34-002, the potential uncontrolled VOC emissions are below the applicable lb/hr and lb/day standards in Regulation 6.24; therefore, no reporting is required to demonstrate ongoing compliance with Regulation 6.24.

viii. **Control Device Operation**

Regulation 2.16, Section 4.1.9.3 establishes requirements to assure ongoing compliance with the terms and conditions of the permit. The source is required to report all periods of operating outside the established performance indicator range for a control device.

### III. Other Requirements

1. **Temporary Sources:** The source did not request to operate any temporary facilities.
2. **Short Term Activities:** The source did not report any short term activities.
3. **Emissions Trading:** N/A
4. **Alternative Operating Scenarios:** The source did not request to operate under any alternative operating scenarios.
5. **Compliance History:**

Date	Description	Penalty	Status
04/11/2007	Exceeding ASL for Nickel Oxide	\$1000	In compliance
09/08/2010	Visible NO <sub>x</sub> plume	\$1000	In compliance

### 6. Insignificant Activities

Insignificant Activities		
Description	Quantity	Basis (Regulation 1.02)
EU 215-W50, Wastewater Treatment System; Collection, chemical precipitation, pH adjustment and equalization of plant wastewater prior to discharge to MSD, de minimis under Regulation 5.21 Section 2	1	Section 1.38.1.1
Lab ventilating and exhausting systems for nonradioactive materials	7	Appendix A, Section 3.11
Research & Development	1	Appendix A, Section 3.27

EU 215-W50 consists of the equipment in the following table. The potential sulfuric acid emissions are less than the de minimis levels in Regulations 5.00 and 5.21.

Emission Point	Description	Construction	Stack ID
T-215-W50-002	H <sub>2</sub> SO <sub>4</sub> Tank, 50,000 lbs	1994	S-215-W50-002
T-215-W50-005	pH Adjust Tank, H <sub>2</sub> SO <sub>4</sub>		NA

- 1) Insignificant Activities identified in District Regulation 1.02, Appendix A may be subject to size or production rate disclosure requirements.
- 2) Insignificant Activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.

- 3) Activities identified in Regulation 1.02, Appendix A, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the permit.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the pollutant Potential To Emit (PTE) as the annual emission for each piece of equipment.
- 6) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 7) The owner or operator shall annually submit an updated list of insignificant activities, including an identification of the additions and removals of insignificant activities that occurred during the preceding year, with the compliance certification due April 15<sup>th</sup>.